

**ABSTRACT**

A data transmission system is provided comprising a disk controller and a read channel. The disk controller comprises a controller for controlling said first hardware component, a first clock for receiving a clock signal, a first transceiver for transmitting or receiving data, a first sync mark receiver to receive a sync mark signal, and a first data gate circuit for transmitting a data gate signal. The read channel comprises a second clock for transmitting the clock signal, a second transceiver for transmitting or receiving the data, a second sync mark transmitter transmitting the sync mark signal, and a second data gate circuit for receiving the data gate signal. During a read operation after the data gate signal is transmitted, the controller counts the clock signal when the sync mark is received and when the count is equal the amount of data to be read, a time period is dropped from the clock signal.